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KNOWLEDGE.**



NETWORK



LEARN



DISCOVER

CollaborateCanada.com

Build Embedded Canvas PowerApps to Replace Your Dialogs

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#CollaborateCanada

Who Am I?

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<https://crm.audio/category/podcasts/dynamics365-portals/>



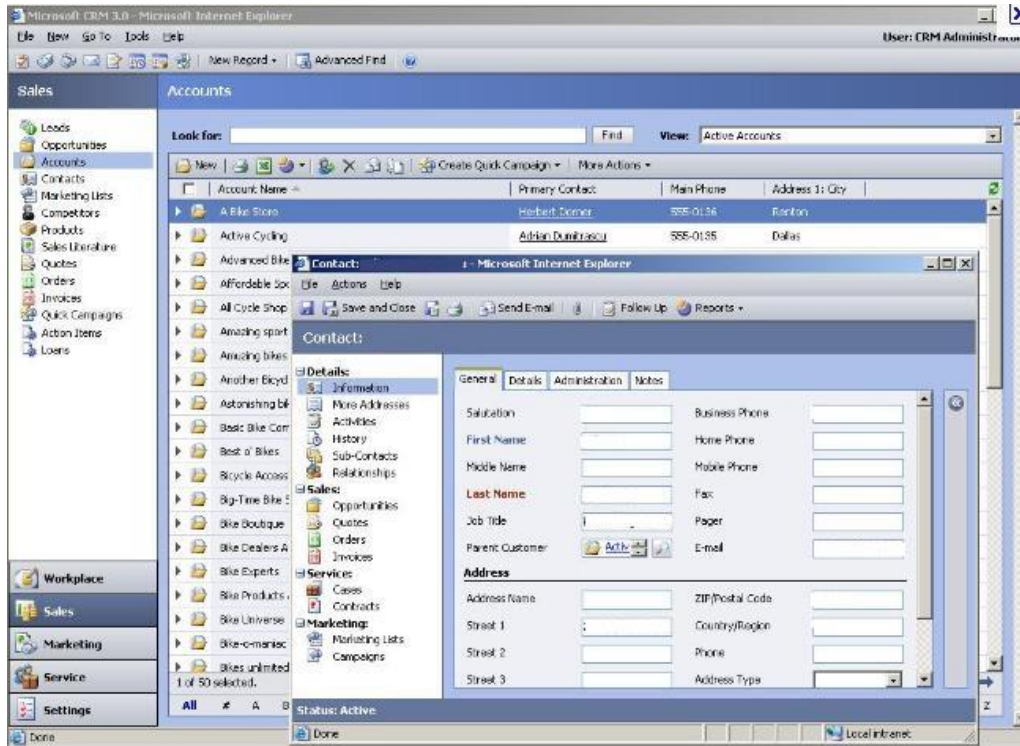
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Agenda

- Intro
- What is the Power Platform?
- Using Dialogs
- Replacing Dialogs with Embedded Canvas Apps
- How to Embed a Canvas App on a Model Driven Form
- Other old stuff you should update!
- Q&A

What is the Power Platform?

Dynamics CRM: In the Beginning



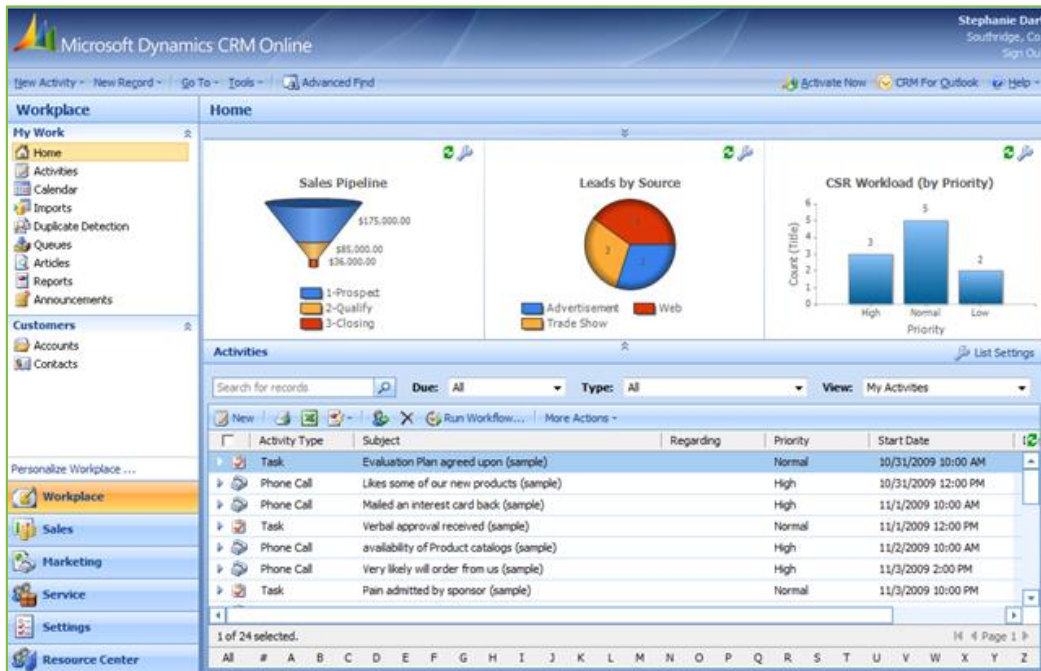
Dynamics CRM

- Sales
- Service
- Marketing

Business Application Layer

Microsoft SQL

Dynamics CRM Online



Dynamics CRM Online

- Sales
- Service
- Marketing

Business Application Layer

Microsoft SQL

AZURE/Office 365

xRM – Unique Line of Business Apps



Unique Line of Business Apps

a.k.a. xRM Applications

“anything” Relationship Management

Dynamics CRM/CRM Online

- Sales
- Service
- Marketing

Business Application Layer

Microsoft SQL

AZURE

xRM – Unique Line of Business Apps



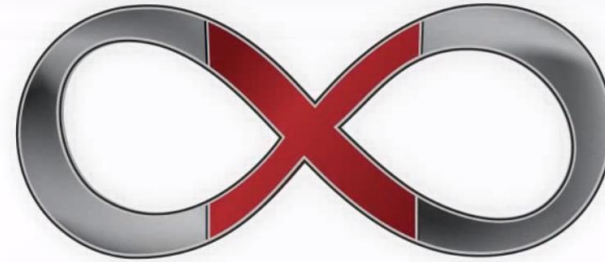
- Data Entity and Relationships
- Multi-user
- Web Based
- User Security and Authentication
- User Interface
- Automation (Workflow)
- Reporting
- Integration
- Mobile
- Etc...

xRM – Unique Line of Business Apps

xRM

One Platform. Many Applications.

<https://youtu.be/Yru5CkANOKA>



P O S S I B I L I T I E S

Renaming: Dynamics 365



Microsoft
Dynamics 365



Dynamics 365 (CRM, F&O, Bus. Central)



Microsoft
Dynamics 365

Unique Line of Business Apps
a.k.a. xRM Applications
“anything” Relationship
Management

Dynamics 365 for Customer
Engagement

- Sales
- Service
- Marketing

Business Application Layer

Microsoft SQL

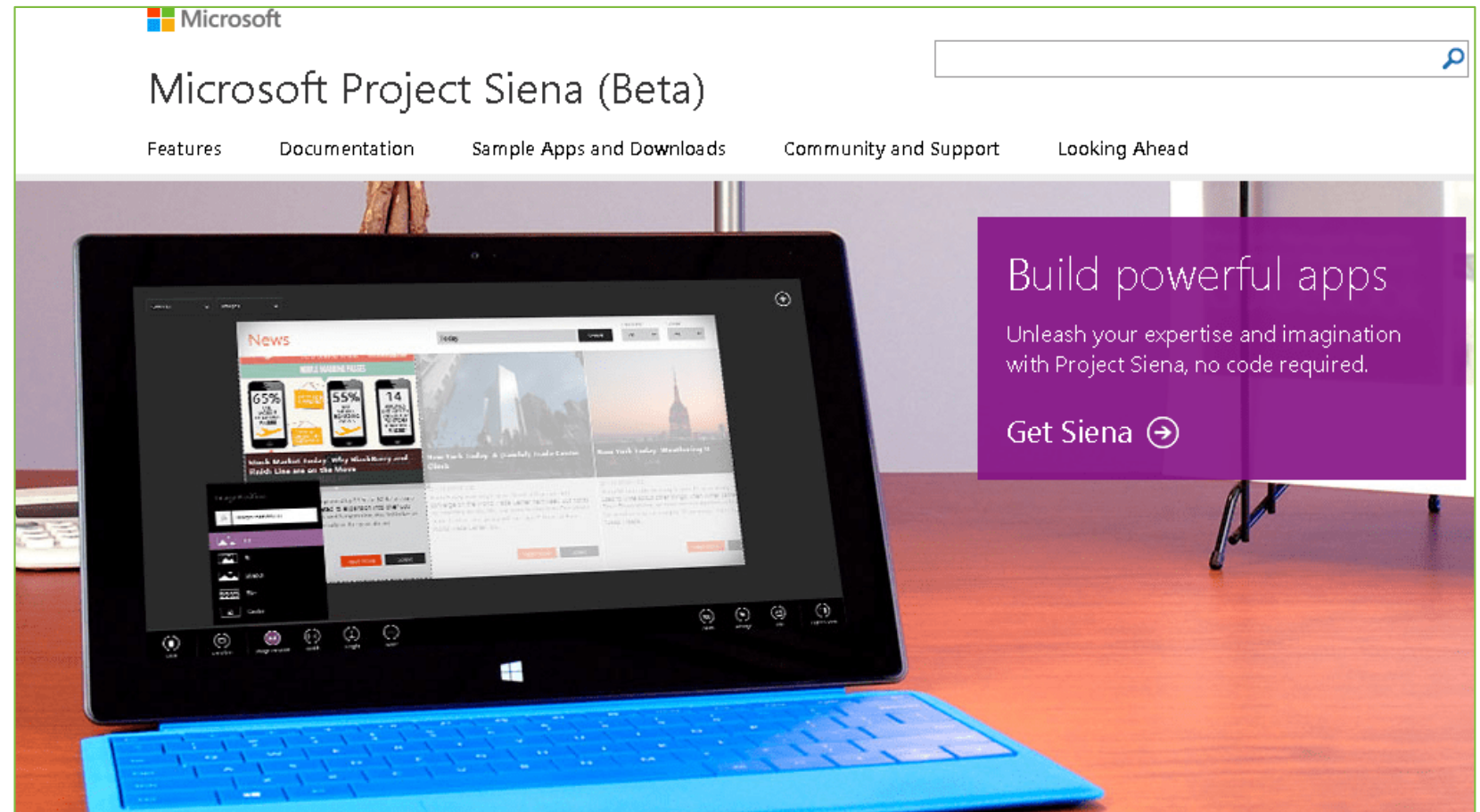
AZURE

Dynamics
365
Finance &
Operations

Dynamics
365
Business
Central



Project Siena

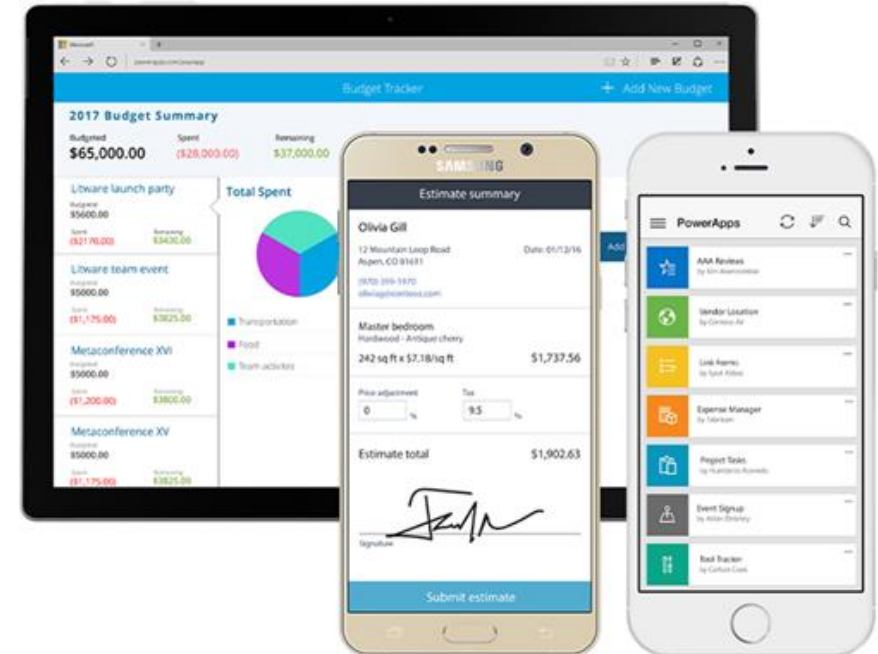


“Classic” PowerApps

PowerApps – low code/no code

- SharePoint
- Office 365
- SQL
- etc

AZURE

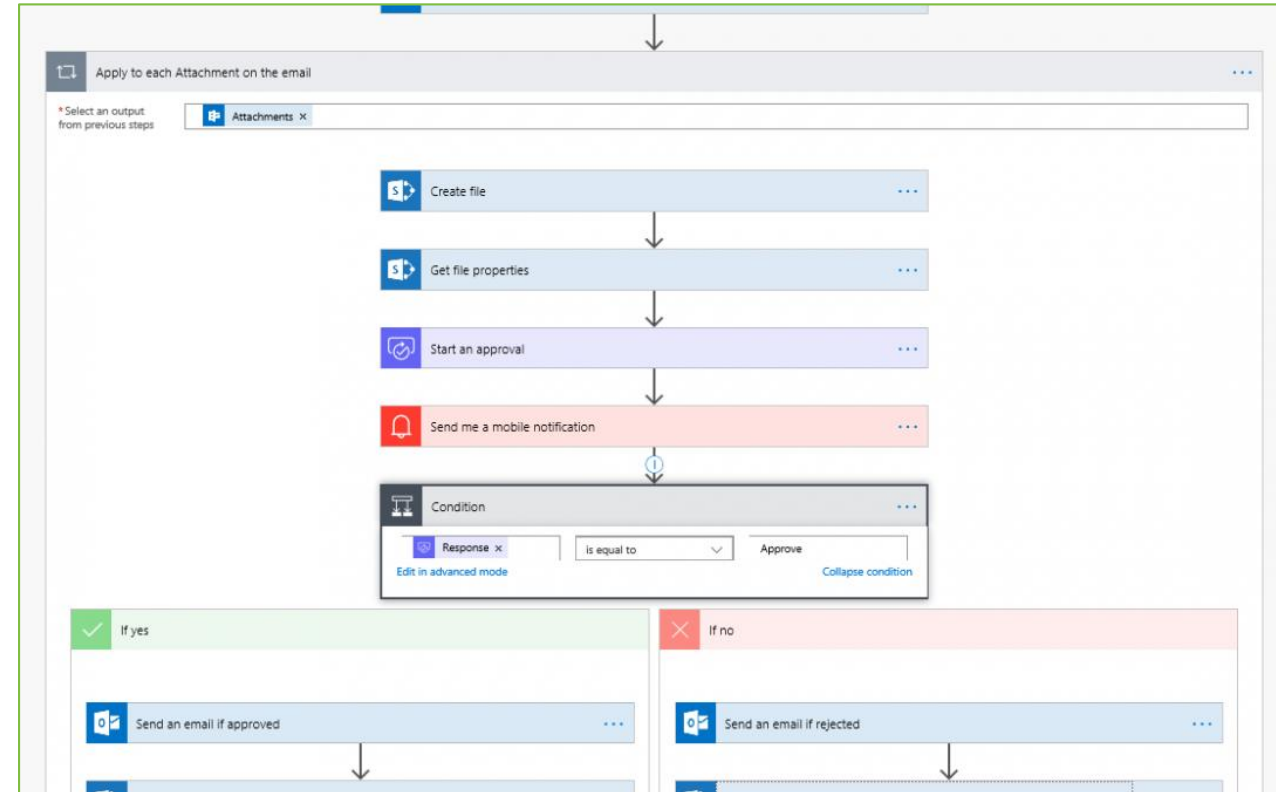


Microsoft Flow

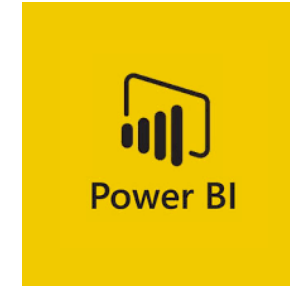
Flow – low code/no code workflows

- SharePoint
- Office 365
- SQL
- Etc

AZURE



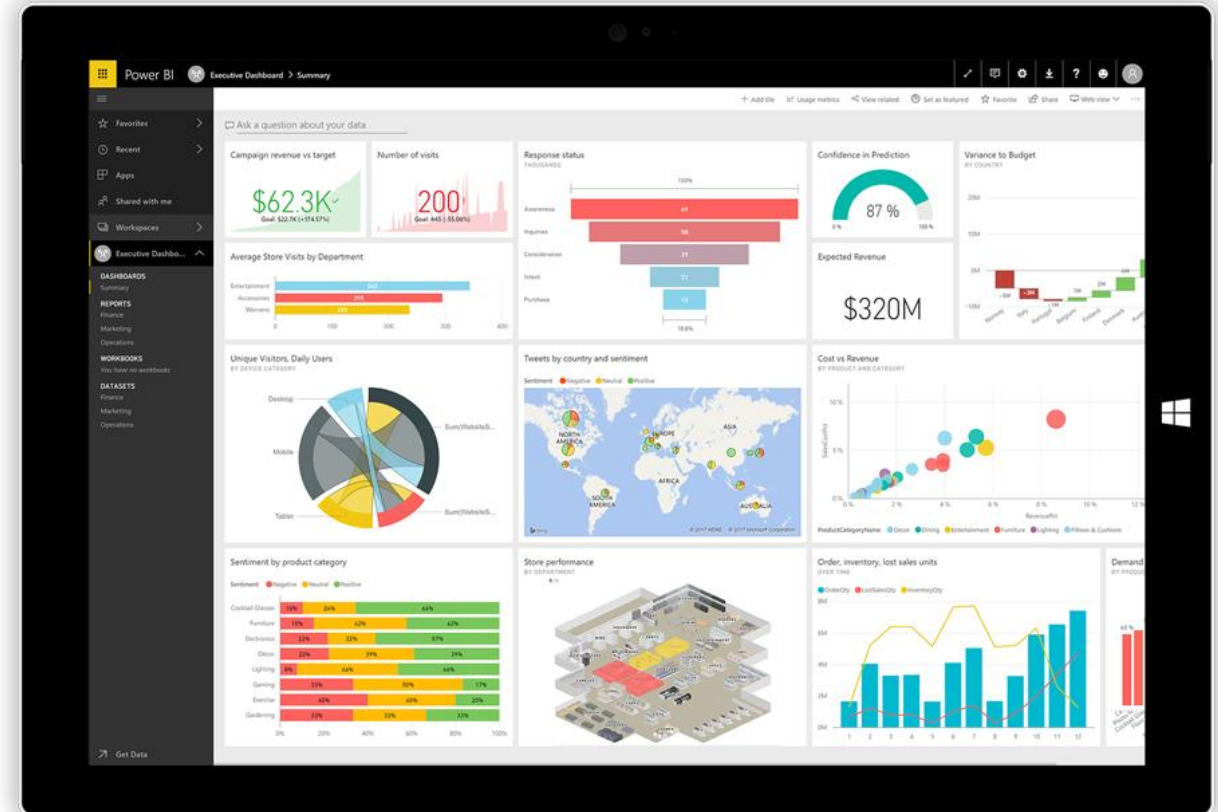
PowerBI



Power BI – Reporting

Any data source

AZURE



Maybe need a Database with Common Entities...?



Common Data Service

Common Entities like;

- Accounts
- Contacts
- Activities...

PowerApps – low code/no code

- SharePoint
- Office 365
- SQL
- Etc

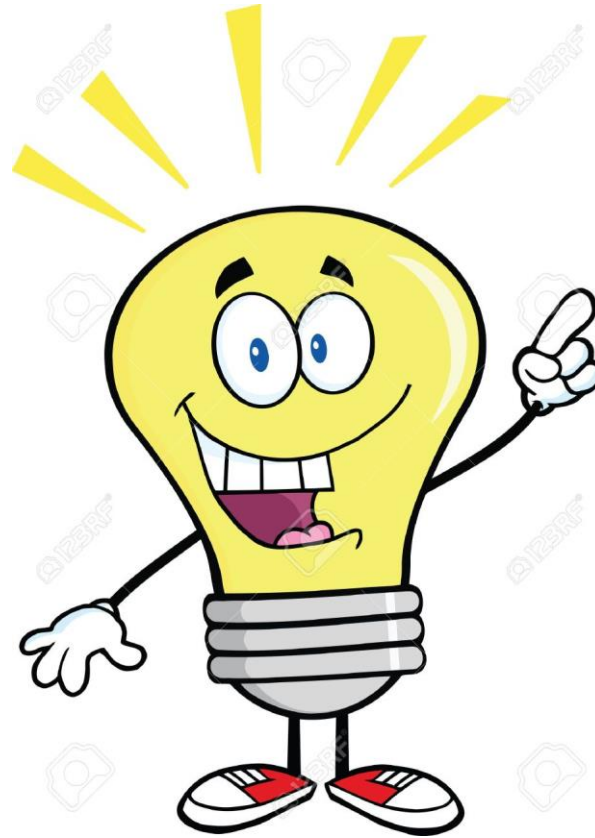
COMMON
DATA SERVICE
(CDS v1.0)

Common Data
Model

AzureSQL

AZURE

What can we do with this new tech?

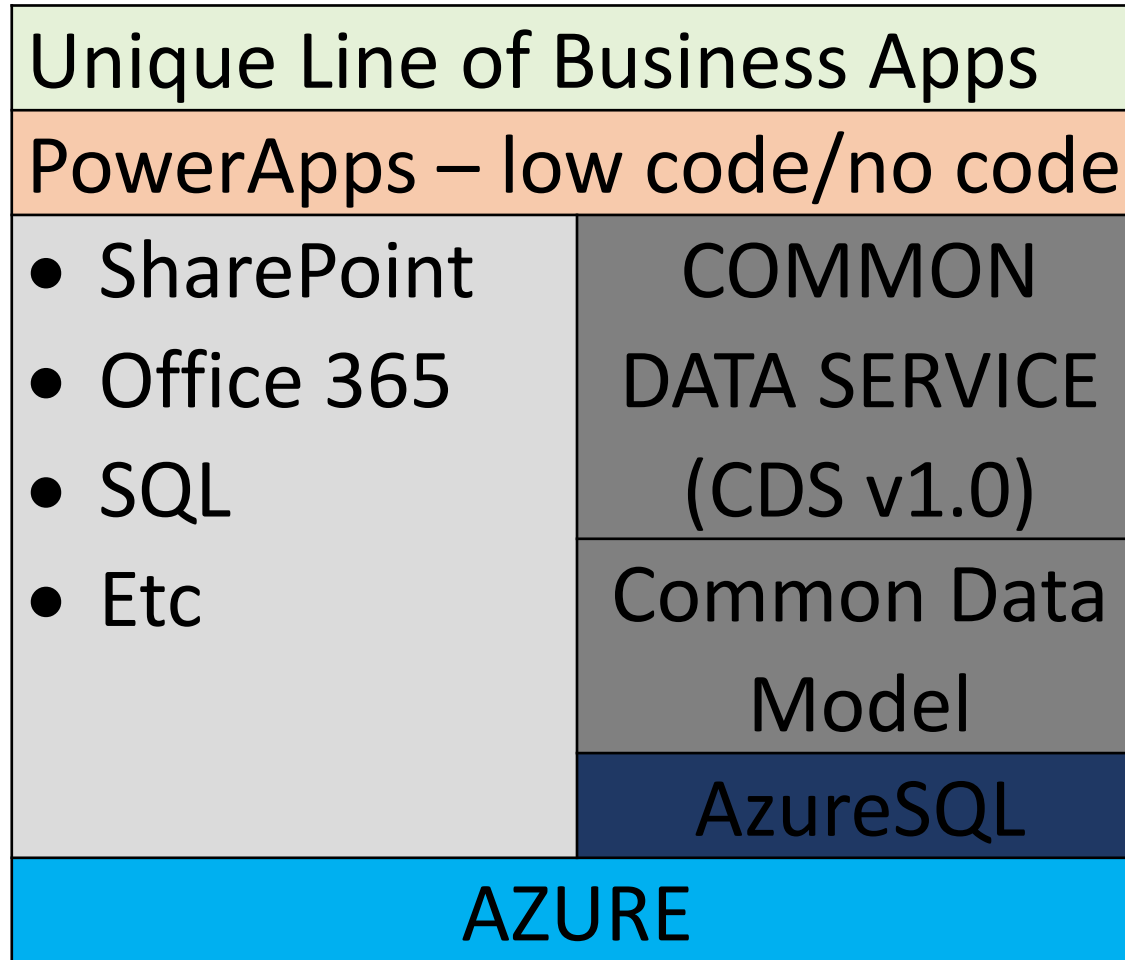


PowerApps – Unique Line of Business Apps



- Data Entity and Relationships
- Multi-user
- Web Based
- User Security and Authentication
- User Interface
- Automation
- Reporting
- Integration
- Mobile
- Etc...

What can we do with this new tech?



**Wait a minute... don't
we have that already?**





Dynamics 365, PowerApps, Flow, PowerBI – Better together!



Power BI



Microsoft Flow

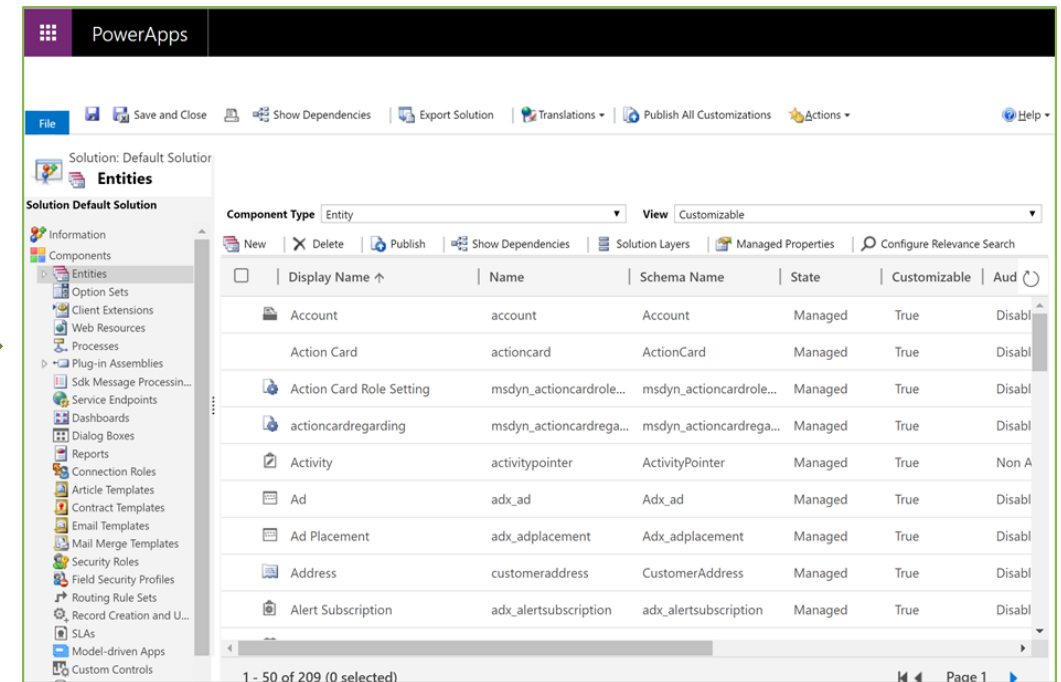
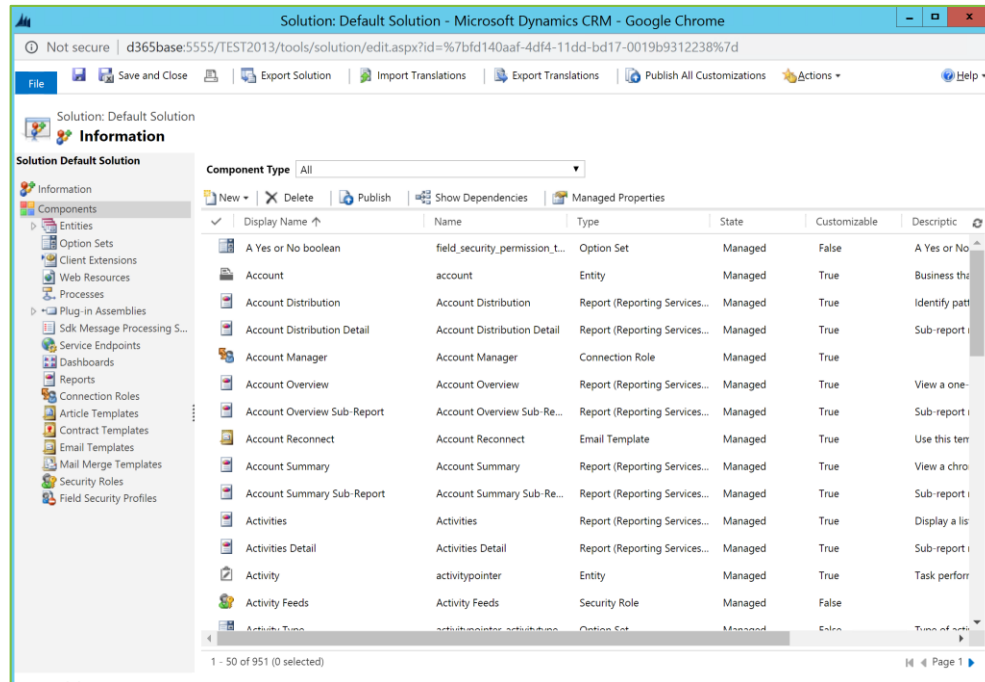


PowerApps

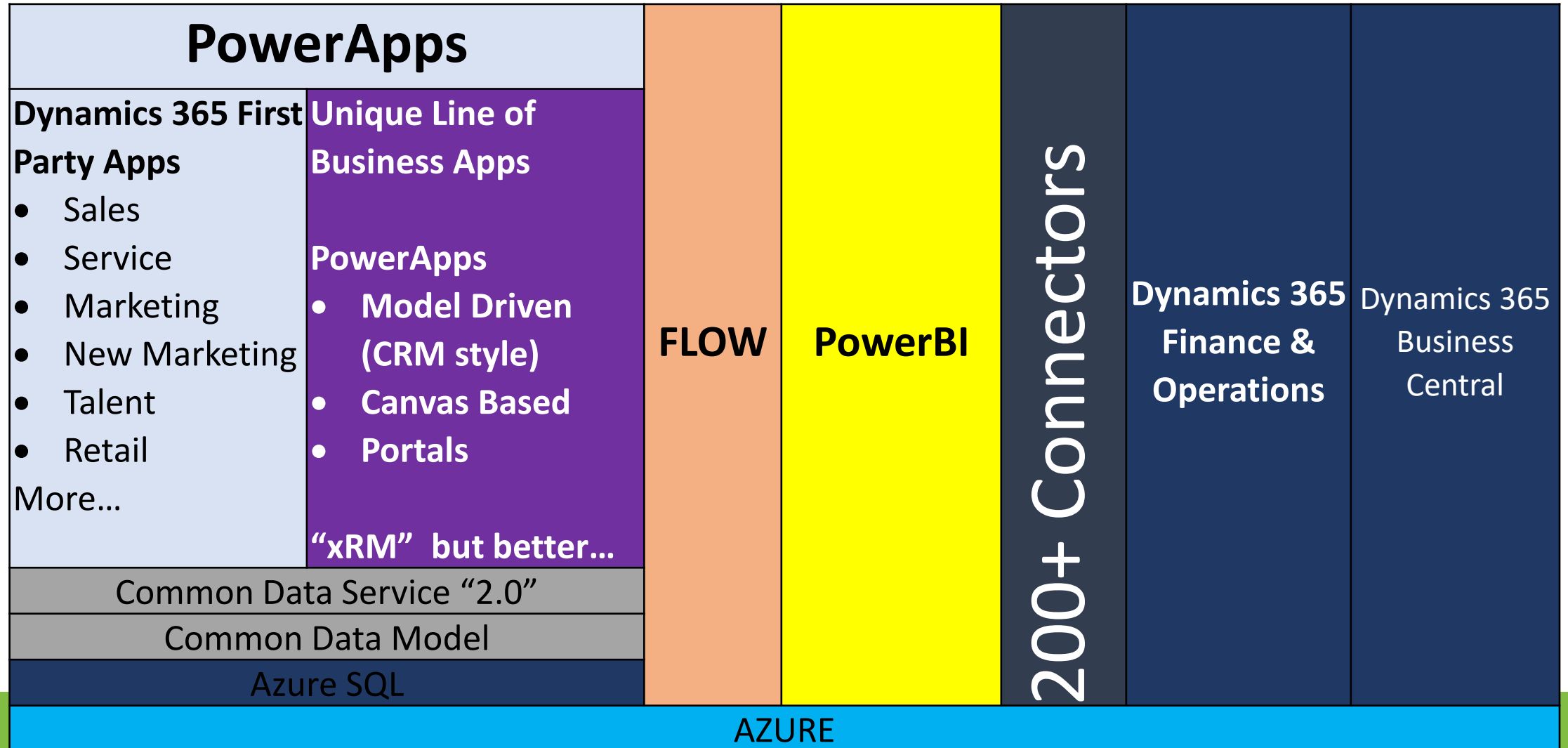
Dynamics 365, PowerApps, Flow, PowerBI – Better together!



Overnight, we all became PowerApps Experts!



The Power Platform

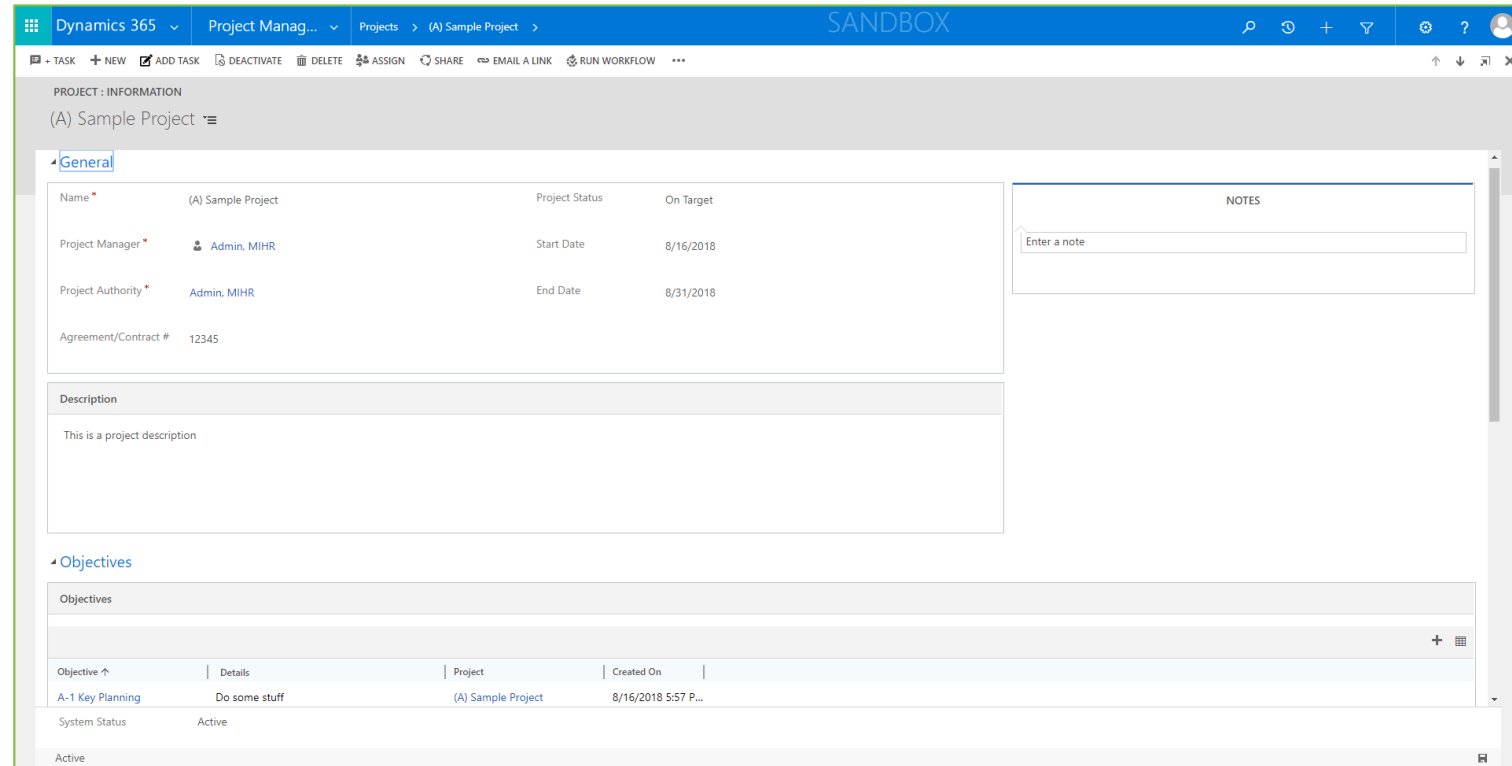


Terminology

- Classic Web Interface
- Unified Interface
- Canvas App
- Model Driven App
- PowerApp Component Framework control

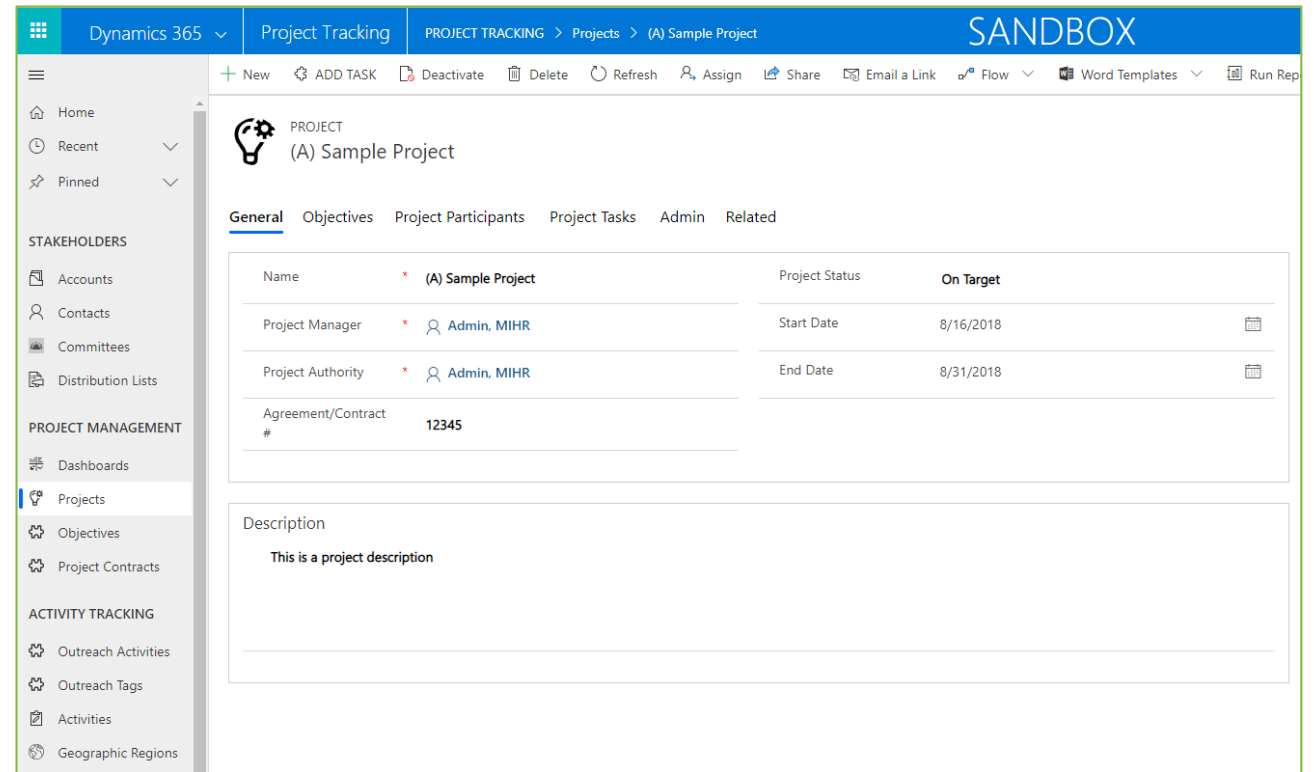
Classic Web Interface

- Existing “CRM” style interface
- Build for Web Browsers
- Tricky to navigate
- Lots of white space
- Introduced in CRM 2013
- ~~Will be~~ **deprecated**
October 2020!



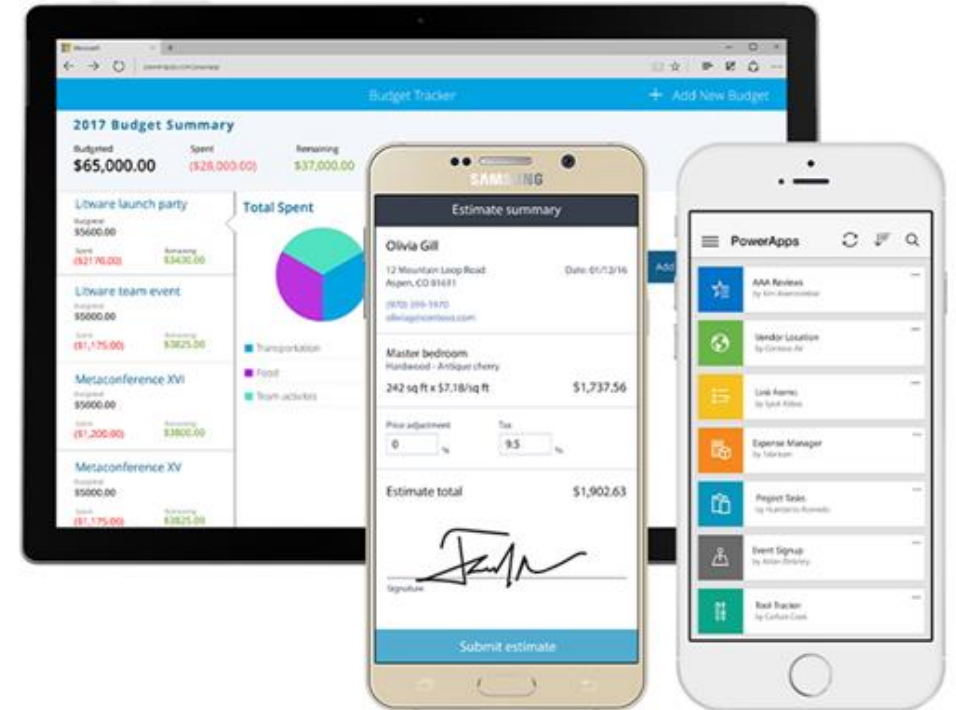
Unified Interface

- New, updated “CRM” style interface
- Scales to different layouts
- Faster
- Side Navigation, Tabs (remember CRM 2011?)
- Default experience moving forward
- **Does not support Dialogs**



Canvas App

- Traditional “PowerApp”
- Extremely flexible layout
- Variety of devices (web, mobile, etc)
- 100s of Connectors (including CDS)
- Constantly evolving
- Great for “single task” type applications
- Can be embedded in Model Driven



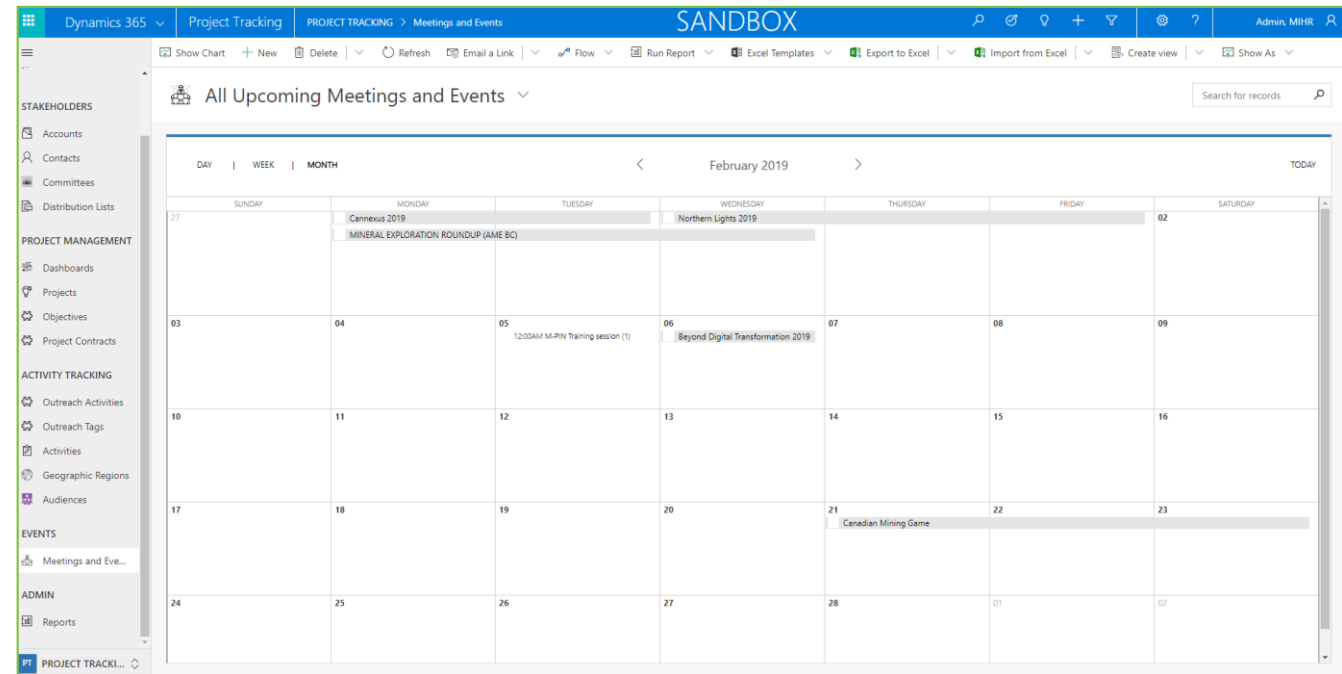
Model Driven App

- Traditional “CRM” style interface
- Entities, Views, Forms
- Standard Layout
- Backend is CDS database
- Build line of business apps quickly
- Admin or complex applications
- Dynamics 365 CE is a model driven app

The screenshot displays the Dynamics 365 user interface for a 'Project Tracking' app. The top navigation bar includes 'Dynamics 365', 'Project Tracking', and the breadcrumb 'PROJECT TRACKING > Projects > (A) Sample Project'. The right side of the header shows 'SANDBOX' and a toolbar with actions like 'New', 'ADD TASK', 'Deactivate', 'Delete', 'Refresh', 'Assign', 'Share', 'Email a Link', 'Flow', 'Word Templates', and 'Run Rep'. The left sidebar contains a navigation menu with categories: 'STAKEHOLDERS' (Accounts, Contacts, Committees, Distribution Lists), 'PROJECT MANAGEMENT' (Dashboards, Projects, Objectives, Project Contracts), and 'ACTIVITY TRACKING' (Outreach Activities, Outreach Tags, Activities, Geographic Regions). The 'Projects' item is selected. The main content area shows the 'General' tab for '(A) Sample Project'. It contains a table with fields: Name (A) Sample Project, Project Status (On Target), Project Manager (Admin, MIHR), Start Date (8/16/2018), Project Authority (Admin, MIHR), End Date (8/31/2018), and Agreement/Contract # (12345). Below the table is a 'Description' section with the text 'This is a project description'.

PowerApps Component Framework

- Customized User Controls for Model Driven Apps
- Allows developers to create customized user experience controls
- Some created by Microsoft, many created by community
- **Embedded Canvas App is type of Control**
- Other examples are editable grid, calendar control, etc.



<https://pcf.gallery>

Dialogs

- Workflows with user interaction
- Use Case – Project Task Tracking

The “Old Way” – Using Dialogs in the Classic Web App

DEMO

Task Tracking Against Project

Dynamics 365 | **Project Manag...** | **Projects** > **(A) Sample Project** > **SANDBOX**

+ TASK **+ NEW** **ADD TASK** **DEACTIVATE** **DELETE** **ASSIGN** **SHARE** **EMAIL A LINK** **RUN WORKFLOW** **...**

PROJECT : INFORMATION
(A) Sample Project

General

Name *	(A) Sample Project	Project Status	On Target
Project Manager *	Admin, MIHR	Start Date	8/16/2018
Project Authority *	Admin, MIHR	End Date	8/31/2018
Agreement/Contract #	12345		

NOTES

Enter a note

There aren't any notes to show. To get started, enter a note.

Description

This is a project description

Objectives

System Status	Active
---------------	--------

Active

Adding Project Tasks Against Objectives

The screenshot displays the Dynamics 365 Project Manager interface for a project named "(A) Sample Project". The top navigation bar includes "Dynamics 365", "Project Manag...", and "Projects > (A) Sample Project >". The main header shows "PROJECT : INFORMATION" and "(A) Sample Project". Below this, a table lists project objectives:

Objective ↑	Details	Project	Created On
A-1 Key Planning	Do some stuff	(A) Sample Project	8/16/2018 5:57 P...
A-2 Project Management	Do some more stuff	(A) Sample Project	8/16/2018 5:58 P...
A-3 Outreach	Do a lot of other stuff	(A) Sample Project	8/16/2018 5:58 P...

Below the objectives table, there is a section for "Project Participants" with a sub-table:

Project ↑	Participant	Participating ...	Part. Role
-----------	-------------	-------------------	------------

At the bottom, the "System Status" is shown as "Active".

Adding Project Tasks Against Objectives

The screenshot displays the Dynamics 365 Project Manager interface. The main window shows a project titled '(A) Sample Project' with a 'General' tab selected. A dialog box titled 'Project - Add Task To Objective' is open, prompting the user to 'Enter in Task Info'. The dialog contains the following fields:

- Name ***: A text field with the value 'A-2 Project Management'.
- Date of Task**: A date picker showing '8/6/2019'.
- Enter subject/title of Task**: A text field with the value 'Development of Project Plan'.
- Add Details of Task**: A text area containing the text 'Wrote project plan with key stakeholders and discussed delivery schedules.'
- Tip**: A section with a right-pointing arrow.

At the bottom of the dialog are buttons for 'Help', 'Summary', 'Next', and 'Cancel'. The background interface shows a 'Description' section with the text 'This is a project' and an 'Objectives' section with a table containing one row: 'System Status' with the value 'Active'.

Copy Project Tasks to other projects

Project - Add Task To Objective
Prompt User if they want to copy this task to another project.

Do you want to copy this task to another project?
☒ No
☐ Yes

Tip >

Click to add comments

HelpSummary

PreviousNextCancel

Building a Dialog

PowerApps

File Close Deactivate Show Dependencies Solution Layers Actions Help

Process: Project - Add Task To Objective Working on solution: Default Solution

Information

Common

- Information
- Audit History
- Solution Health Rules
- Solution Health Rules

Process Sessions

- Process Sessions

General Administration Notes

Hide Process Properties

Process Name* Project - Add Task To Objective Entity Project

Activate As Process Category Dialog

Available to Run

- ☒ As an on-demand process
- ☐ As a child process

Input Arguments

Variables

Steps

- Query Dynamics 365 for Project Objectives
Query: [View properties](#)
- Page: Enter in Task Info
 - Choose the Objective
Prompt and Response: [View properties](#)
Prompt: Which Objective do you want to associate this new task?
Response: Objective
 - Date
Prompt and Response: [View properties](#)
Prompt: Date of Task
 - Subject
Prompt and Response: [View properties](#)
Prompt: Enter subject/title of Task
 - Details
Prompt and Response: [View properties](#)
Prompt: Add Details of Task
- Create: Task [View properties](#)
- Page: Prompt User if they want to copy this task to another project.
 - Do you want to copy this task to another project?

Status: Activated

Accomplishments

- Reduced clicks
- Easier for end users to understand
- Accurate reporting

Going Forward

- Dialogs have been deprecated
- Unified Interface
- Dialogs were never that pretty anyway

The “New Way” – Using an Embedded Canvas App

DEMO

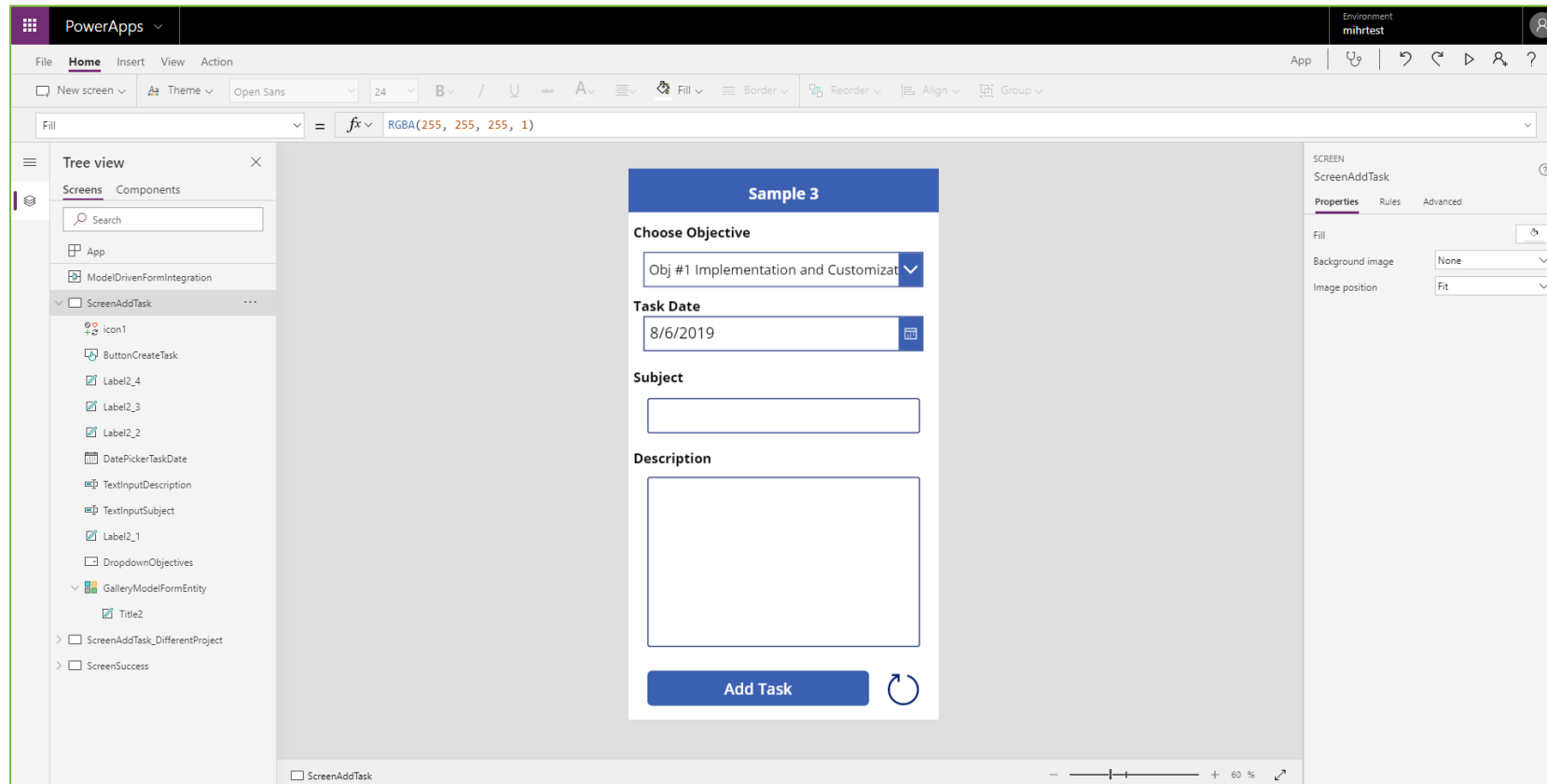
The “New Way” – Using an Embedded Canvas App

The screenshot displays the Dynamics 365 Project Tracking canvas app. The top navigation bar includes 'Dynamics 365', 'Project Tracking', and the breadcrumb 'PROJECT TRACKING > Projects > (A) Sample Project'. The left sidebar lists various entities: STAKEHOLDERS (Accounts, Contacts, Committees, Distribution Lists), PROJECT MANAGEMENT (Dashboards, Projects, Objectives, Project Contracts), ACTIVITY TRACKING (Outreach Activities, Outreach Tags, Activities, Geographic Regions, Audiences), EVENTS (Meetings and Events), and ADMIN (Reports). The main content area is titled 'PROJECT (A) Sample Project' and features tabs for 'General', 'Objectives', 'Project Participants', 'Project Tasks' (selected), 'Admin', and 'Related'. The 'Project Tasks' tab contains a form with the following fields: 'Choose Objective' (a dropdown menu showing 'A-2 Project Management'), 'Task Date' (a date picker showing '8/6/2019'), 'Subject' (a text input field), and 'Description' (a larger text area). A blue 'Add Task' button is positioned at the bottom right of the form, accompanied by a refresh icon. A faint instruction 'Add Project Tasks to Objectives' is visible on the left side of the form area.

Embedding a Canvas App on a Model Driven Form

DEMO

Embedding a Canvas App on a Model Driven Form



Challenges – Writing Data back to CDS – Flow solution

Flow

Create Objective Task

Save Flow Checker Test

PowerApps

Triggered from PowerApp to create Tasks against Objectives in a Project

No additional information is needed for this step. You will be able to use the outputs in subsequent steps.

Create Task Record Linked to Objective

Environment: mihrttest

Entity Name: Tasks

Due Date: Create new record Due Date

Subject: Create new record Subject

Description: Create new record Description

Duration: Type the number of minutes spent on the task. The duration is used in

Priority Value: Select the priority so that preferred customers or critical issues are hand

Owner: Enter the user or team who is assigned to manage the record. This field is

Owner Type: Enter the user or team who is assigned to manage the record. This field

Regarding: Create new record Regarding

Regarding Type: new_objectives

Show advanced options

Update a record

Environment: mihrttest

Entity Name: Tasks

Record Identifier: Task

Due Date: Enter the expected due date and time.

Subject: Type a short description about the objective or primary topic of the task.

Show advanced options

Preference?

Project - Add Task To Objective - Google Chrome

Project - Add Task To Objective

Enter in Task Info

Which Objective do you want to associate this new task?

A-1 Key Planning

Date of Task

Enter subject/title of Task

Add Details of Task

Click to add comments

Help Summary Next Cancel

Dynamics 365 Project Tracking

PROJECT TRACKING > Projects > (A) Sample Project

PROJECT (A) Sample Project

General Objectives Project Participants Project Tasks Admin Related

(A) Sample Project

Choose Objective

A-1 Key Planning

Task Date

5/8/2019

Subject

Description

Add Task

SAI

Other stuff you should replace

- Use Flows instead of Workflows
- Unified Client instead of legacy web client (must do before October 2020)
- Online instead of on-prem
- PCF Controls vs Web Resources
- Outlook App instead of Outlook Client
- PowerBI vs SSRS?

Tips/Advice?

- There is no “conversion tool” Challenge, anyone? (XrmToolBox tool?)
- Good Opportunity to Redesign User Interactions
- Not the only way; Business Process Flows, Custom PCF Controls, or just Flow
- Update to the new Unified Interface. Now. Seriously. Go do it!
- Always start with Flow instead of Workflows.
- New projects, consider vanilla CDS instances, but caution that there is no upgrade path currently to Dynamics 365
- Budget time *weekly* to review new features or updates!

Any Questions?



CollaborateCanada

Thank You For Attending